

Ziying Chen

ROOM 5.38, INFORMATICS FORUM,
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EDUCATION

University of Edinburgh

Ph.D. in Informatics — Laboratory for Foundations of Computer Science (LFCS)

Edinburgh, UK

Jan. 2025 – Present

Beihang University

Bachelor of Computer Science and Technology

Beijing, China

Sept. 2020 - June. 2024

GPA: 93.5/100 (3.89/4.00) **Ranking:** Top 5%

RESEARCH INTERESTS

Vector databases, embedding/retrieval systems, representation learning, cross-model alignment

PUBLICATION & PREPRINTS

- Qingyun Sun^{1*}, **Ziying Chen**^{1*}, Beining Yang², Cheng Ji¹, Xingcheng Fu³, Sheng Zhou⁴, Hao Peng¹, Jianxin Li¹, Philip S. Yu⁵, **GC-Bench: An Open and Unified Benchmark for Graph Condensation**, *NeurIPS 2024*¹.
- **Ziying Chen**, Yang Cao, He Sun, Beining Yang, Tianjian Yang, **Vector Linking via Cross-Model Local Isometric Consistency**, *ICML 2026*.
 - Proposed **Vector Linking** and developed **Geometric Embedding Hashing (GEH)** to align black-box embeddings without raw data, achieving **90% overlap recovery** using only 15 seed pairs.

RESEARCH EXPERIENCE

Research Assistant | Beihang University

Beijing Advanced Innovation Center for Big Data and Brain Computing

Aug. 2023 – June. 2024

Advised by Qingyun Sun

- Established the Graph Condensation Benchmark (GC-Bench) to systematically analyze the performance of graph condensation methods across various dimensions such as effectiveness, transferability, and complexity.
- Developed an easy-to-use library for training and evaluating different graph condensation methods, facilitating reproducible research.

INTERNSHIP

Backend Development Intern | XVERSE

Shenzhen, China

July. 2022 – Aug. 2022

- Implemented and deployed a video encode/decode algorithm, improving video transmission efficiency
- Developed a comprehensive backend task management system
- Ran benchmarking across hardware platforms; automated evaluation and profiling to guide optimizations

TECHNICAL SKILLS

Programming Languages: Python, C++, Java, C, Swift

Deep Learning: Proficient in PyTorch with expertise in custom neural network design

MISCELLANEOUS

Languages: English (Proficient — IELTS 8.0; GRE 336, AWA 4.5); Mandarin, Cantonese (Native)

British Parliamentary Debate: Former President, Beihang English Debating Society; organized training and adjudicated tournaments; multiple international awards as a debater

^{1*}Co-first authors (equal contribution). Qingyun Sun was my undergraduate supervisor.